

Tuesday, May 09, 2017 11:49:32 AM

161247

Page 1

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Dual Mirror Accessory

Start Date: 5/12/2017 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 5/23/2017 **Req'd Qty:** 2.00 ***~***

Customer:

Reference: SCHEDULED/S

Approvals: **Process Plan:** 21 **Date:** MAY 09 2017 **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
-----------------	---------------------

IIN-D350-561

E

DAS 6 9-89 MAY 3 - 2017 0.00

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels per PPP D350-561-045 CHG003

2 DAS 28 MAY 31 2017 9-89

105

Pick Kit

0.00

105

Packaging

Memo

0.00

Packaging

2x, DAS 26 DAS 27 MAY 30 2017
9-89 9-89

110

QC4- 100% Inspect kits for completeness

0.00

110

QC

Memo

0.06

Quality Control

2 DAS 28 MAY 30 2017 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

Work Order ID 161247

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161247

Page 2

Item ID: D350-561-045**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Dual Mirror Accessory**Start Date:** 5/12/2017 **Start Qty:** 2.00***2*****Cust Item ID:****Required Date:** 5/23/2017 **Req'd Qty:** 2.00***2*****Customer:****Reference:** SCHEDULED/S**Approvals:****Process Plan:****Date:****Tooling:****Date:****Run Start*****NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

120

120

Packaging

Packaging

0.00

0.00

MemoIdentify and pack for shipping as per PPP D350-561-045
LOCATION: FG010

2

DAS
28
9-89

MAY 3 0 2017

130

130

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

0.20

MemoDAS
21
9-89

MAY 3 1 2017

DAS
21
9-89

MAY 3 1 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER :							
Misidentified ☐	☐	Past Due								

Picklist Print

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Page 1

Work Order ID: 161247

161247

Parent Item: D350-561-045

D350-561-045

Parent Item Name: Dual Mirror Accessory

Start Date: 5/12/2017

Required Date: 5/23/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP D05.09.15 Step 3 pick list revised per D350-561 Rev.
CKJ/JLM IPP Rev:E
add pick kit DD 10.04.19 verified by:EC IPP Rev:F 10.09.14 per
IIN revD DD verf:EC IPP REV:G 12.05.30 PER ECN 12-
596 DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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AN3-5A

Purchased

No

105

Each

296.0000

2

4

AN3-5A

Bolt

**

DAS
26
9-89

DAS
27
9-89
MAY 30 2017

Location

Loc Qty

Loc Code

FP001

4

m136182

4

GA

250

m136986

250

ST350

42

m136182

42

D2011-101

Manufactured

No

105

Each

23.0000

1

2

D2011-101

Mirror 6"

**

DAS
26
9-89

DAS
27
9-89
MAY 30 2017

Location

Loc Qty

Loc Code

FG

1

106348

1

ST384

22

154437

3

158473

19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 2

Work Order ID: 161247

161247

Parent Item: D350-561-045

D350-561-045

Parent Item Name: Dual Mirror Accessory

Start Date: 5/12/2017

Required Date: 5/23/2017

Start Qty: 2.00

Required Qty: 2.00

D2012-113 Manufactured No

105 Each 9.0000 2 4

D2012-113

Clamp

DAS
28
9-89

Location

Loc Qty

Loc Code

ST001

9

156561

3

159869

6

MAY 30 2017

DAS
26
9-89

D3635-3 Manufactured No

105 Each 0.0000 2

D3635-3

Gasket

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

42

m134055

42

ST263

547

m137061

100

m137164

447

MAY 30 2017

DAS
26
9-89

NAS1149D0363J Purchased No

105 Each 589.0000 4 8

NAS1149D0363J

Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

48

M135056

48

ST260a

2000

M137371

2000

ST263

2074

M137166

74

M137381

2000

MAY 30 2017

DAS
26
9-89

Tuesday, May 09, 2017 11:49:38 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Tuesday, May 09, 2017 11:49:38 AM

Page 3

Work Order ID: 161247

161247

Parent Item: D350-561-045

D350-561-045

Parent Item Name: Dual Mirror Accessory

Start Date: 5/12/2017

Required Date: 5/23/2017

Start Qty: 2.00

Required Qty: 2.00

MS21042L3

Purchased

No

105

Each

1,437.000

2

4

MS21042L3

Nut

**

137495.

DAS
26
9-89

DAS
27
9-89

MAY 30 2017

DA.
28
9-85

Location

Loc Qty

Loc Code

FP001

91

m135945

91

GA

464

m134360

102

M136665

362

ST303

882

m137073

11

m137166

3

m137321

868

4x.

5. PARTS LIST

Qty -041	Qty -043	Qty -045	Qty -141	Qty -143	Qty -241	Qty -243	Part Number	Description
X	1						D350-561-041	SINGLE MIRROR INSTALLATION, RH
	X						D350-561-043	DUAL MIRROR INSTALLATION, RH
	1	X		1		1	D350-561-045	MIRROR KIT
			X	1			D350-561-141	SINGLE MIRROR INSTALLATION, RH
				X			D350-561-143	DUAL MIRROR INSTALLATION, RH
					X	1	D350-561-241	SINGLE MIRROR INSTALLATION, LH
						X	D350-561-243	DUAL MIRROR INSTALLATION, LH
1		1	1		1		D2011-101	Mirror
1							D2012-101	Arm
1							D2012-103	Arm
1			1				D2012-105	Arm
					1		D2012-106	Arm
2			1		1		D2012-107	Clevis
1							D2012-109	Bracket
1			1		1		D2012-111	Bracket
4		2					D2012-113	Clamp
1			1		1		D2012-115	Bracket
4			2		2		D2022-101	Spacer
4							D2856-100-325	Abrasion Strip
1*		1*	1*		1*		D3014-1	Locknut
			1		1		D3629-1	Bracket
			1		1		D3635-1	Gasket
		2					D3635-3	Gasket
			1				D3646-1	Arm
					1		D3646-2	Arm
			1				D3646-3	Arm
					1		D3646-4	Arm
			2		2		D4070-041	Clamp
2							AN3-4A	Bolt
2		2	6		6		AN3-5A	Bolt
1			1		1		AN3-6A	Bolt
2			1		1		AN4-10A	Bolt
3			3		3		AN4-5A	Bolt
14		4	8		8		AN960JD10	Washer
9		2	8		8		AN960JD416	Washer
1*		1*	1*		1*		AN960JD416L	Washer
5		2	4		4		MS21042L3	Nut (or MS21042-3)
5			4		4		MS21042L4	Nut (or MS21042-4)

*INCLUDED AS PART OF D2011-101 MIRROR

Work Order ID 161247***161247***

Page 1

Tuesday, May 09, 2017 11:49:32 AM

Item ID: D350-561-045 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Dual Mirror Accessory
Start Date: 5/12/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 5/23/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference: SCHEDULED/S
Approvals: Process Plan: _____ Date: **MAY 09 2017** Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN-D350-561	E	MAY 3 - 2017							
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels per PPP D350-561-045	CHG003							
105	Pick Kit	0.00							
105									
Packaging	Memo	0.00							
Packaging									
110	QC4- 100% Inspect kits for completeness	0.00							
110									
QC	Memo	0.06							
Quality Control									

CB

Q

MAY 31 2017



Department of Transport

Supplemental Type Certificate

This approval is issued to:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ontario
Canada K6A 1K7

Number: SH91-20

Issue No.: 3

Approval Date: April 10, 1991

Issue Date: August 13, 2010

Responsible Office:

Prairie and Northern

Aircraft/Engine Type or Model:

EUROCOPTER FRANCE AS 350 B, B1, B2, B3, BA, D, D1
EUROCOPTER FRANCE AS 355 E, F, F1, F2, N, NP

Canadian Type Certificate or Equivalent:

EUROCOPTER FRANCE AS 350 Series: H-83
EUROCOPTER FRANCE AS 355 Series: H-87

Description of Type Design Change:

Cargo Mirror Installation

**Installation/Operating Data,
Required Equipment and Limitations:**

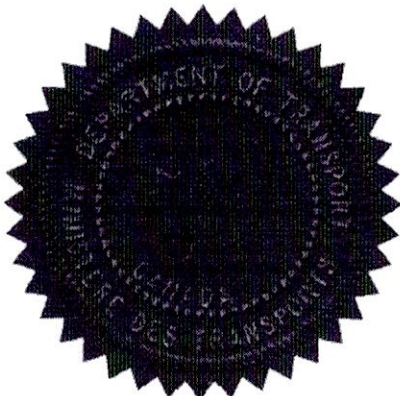
Manufacture of the cargo mirror kits must be in accordance with Transport Canada approved Dart Aerospace Ltd. Master Document List MDL-D350-561, Revision A, dated 10-06-16, or later approved revision.

Installation of the cargo mirror kits must be in accordance with Transport Canada approved Dart Aerospace Ltd. Installation Instructions D350-561, Revision D, dated 10-06-16, or later approved revision.

Maintenance of the cargo mirror kits must be in accordance with Transport Canada accepted Dart Aerospace Ltd. Instructions for Continued Airworthiness ICA-D350-561, Revision 0, dated 10-06-16, or later accepted revision.

The basis of certification for this modification is FAR 27, up to and including Amendment 27-23 for the affected areas.

-- End --



Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.

Greg Oucharek
For Minister of Transport

Canada